

Work Order ID 88746

88746

Page 1

August-01-12 12:32:53 PM

Item ID: D206-667-103

Accept

N900040100

Setup Start

NS1

Revision ID:

Item Name: Crosstube Fwd

Start Date: 8/01/12 Start Qty: 1.00

1

Cust Item ID:

Required Date: 8/03/12 Req'd Qty: 1.00

1

Customer:

Reference: REWORK DSI 9544

DART Dart Aerospace Ltd. 1270 ABERDEEN ST. HAWKESBURY ON CANADA K6A 1K7				TC APPROVAL # 09-89 TEL: 1-613-632-5200	
PN	D206-667-103	CHG	CHG005		
DESC	Crosstube Fwd High	STC	SH01-5		
LOT	B78488	STC	SR01304NY		
WIDEL	Beil 206L/L1/L3/L4	STC			
MADE IN CANADA 02/29-1					

Approvals: Process Plan: *[Signature]*

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

Stop

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D206-667-143	Rev C (DEO)								
DSI9565	A								
100		0.00							
100	DOCUMENT CONTROL								
DC	Memo	0.00							
Document Control	Photocopy bluefile and create labels as per PPP D206-667-103 CHG005								
230		0.00							
230	Crosstubes								
Crosstubes	Memo	0.00							
Crosstubes	PULL FROM STOCK: 1 X D206-667-103 B78488 (KEEP KIT IN BOX TO REPACKAGE AFTER REWORK) REOWRK PER DSI 9544								

DAS 16 2/06/12
7.6
006

OK per m15 12/8/7

A9 12-8-2

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data <input type="checkbox"/>											
Equip/Tooling <input type="checkbox"/>											
Operator <input type="checkbox"/>											
Material <input type="checkbox"/>											
Setup <input type="checkbox"/>											
Other <input type="checkbox"/>											
Process <input type="checkbox"/>											
Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											
FAULT CATEGORY											
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube			General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio			<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions			<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other		

88746

August-01-12 12:32:53 PM

N900040100

Setup Start *NS1*

Stop ***NS2***

Start Date: 8/01/12 **Start Qty:** 1.00 ***1***

Cust Item ID:

Required Date: 8/03/12 Req'd Qty: 1.00 * 1 *

Customer:

Run Start *NR1*

Approvals: _____ **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Stop *NR2*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

240

QC5- Inspect part completeness to step on W/O

0.00

240

0.00

QC

Memo

Quality Control

$P_{10} \rightarrow$

250

Pick Kit

0.00

250

0.00

Packaging

Memo

Packaging

ENSURE ORIGINAL KIT IS IN BOX

260

QC4- 100% Inspect kits for completeness

0.00

260

0.00

QC

Memo

Quality Control

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. <u>12-1695</u>				DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector		
Doc/Data <input type="checkbox"/> Equip/Tooling <input type="checkbox"/> Operator <input type="checkbox"/> Material <input type="checkbox"/> Setup <input type="checkbox"/> Other <input type="checkbox"/> Process <input type="checkbox"/> Supplier <input type="checkbox"/> Training <input type="checkbox"/> Unapproved <input type="checkbox"/>	12/06/16	260	H	Found when inspecting DSZ 9565 (D706-667-017) that the wrong qty of clamps were installed on the tube. also was missing at inspection see ncr 12-1695	(DAS 16 9-85) a2042 12/06/16	Re work correctly to DSZ 9565 D706-667-017 	AB 12-8-3	N 12-08-24	(DAS 16 9-85) a2042 12/06/16		
FAULT CATEGORY											
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube			General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio			<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions			<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other		

Work Order ID 88746

88746

Page 3

August-01-12 12:32:53 PM

Item ID: D206-667-103

Accept

N900040100

Setup Start ***NS1***

Revision ID:

Stop ***NS2***

Item Name: Crosstube Fwd

Start Date: 8/01/12 Start Qty: 1.00

1

Cust Item ID:

Required Date: 8/03/12 Req'd Qty: 1.00

1

Customer:

Reference: REWORK DSI 9544

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Run Start ***NR1***

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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270

0.00

270

Packaging

0.00

Packaging

Memo

REPACKAGE PER PPP USING NEW B/N
NEW LABELS REQ'D. ADD DSI 9544 TO PAPERWORK
Identify and pack for shipping as per PPP D206-667-103
Location: 53
PPP Rev: _____

280

QC21- Final Inspection - Work Order Release

0.00

280

QC

Memo

0.00

Quality Control

CK 12/8/28

ME 12-08-27

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

QA Closed: _____ Date: _____

Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>					
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Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											
FAULT CATEGORY											
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube			General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio			<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions			<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other		

August-01-12 12:32:53 PM

Required Qty: 1.00

[illegible]

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

DQA: _____ Date: _____

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Work Order: _____ Part No. _____ NCR No. _____				DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>		AGAINST DEPARTMENT/PROCESS <div style="display: flex; justify-content: space-between;"> <div> Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/> </div> <div> Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/> </div> <div> Water Jet <input type="checkbox"/> Prod. Eng. Coord. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/> </div> <div> Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/> </div> </div>					
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Setup <input type="checkbox"/>											
Other <input type="checkbox"/>											
Process <input type="checkbox"/>											
Supplier <input type="checkbox"/>											
Training <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											

FAULT CATEGORY									
Landing Gear			General						
<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain	<input type="checkbox"/> Ovalized	<input type="checkbox"/> Pressure/Forced					
<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware	<input type="checkbox"/> Over/Under tolerance	<input type="checkbox"/> Temperature/Cure					
<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Inspection Incomplete	<input type="checkbox"/> Part Incorrect	<input type="checkbox"/> Weld					
<input type="checkbox"/> Crushed/Crimped.	<input type="checkbox"/> Burrs	<input type="checkbox"/> Instructions Incomplete/Unclear	<input type="checkbox"/> Part Lost/Missing	<input type="checkbox"/> Wrong Stock Pulled					
<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Maintenance	<input type="checkbox"/> Part Moved						
<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Countersink	<input type="checkbox"/> Mislabeled	<input type="checkbox"/> Positioned Wrong						
<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Misread	<input type="checkbox"/> Power Loss/Surge	<input type="checkbox"/> Other					
<input type="checkbox"/> Ripples in Bend	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Offset							
<input type="checkbox"/> Torque Waves in Extrusion	<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Calibration							
<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Sequence							
<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions							

DART SERVICE INSTRUCTION

TO AMEND INSTALLATION INSTRUCTIONS IIN-D206-667 REV. C AND EARLIER AND
INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA-D206-667 REV. 2 AND EARLIER

REF: CANADIAN STC: SH01-5
REF: FAA STC: SR01304NY
REF: EASA STC: EASA.IM.R.S.01179

PURPOSE

The purpose of this service instruction is to add the optional D206-667-017 Kit and provide guidelines to install extra clamps on D206-667-101/-103 or D407-667-105 forward crosstubes to allow fastening of OEM grounding straps.

INSTRUCTIONS:

- 1) If installed, follow Section 32.1 of ICA-D206-667 for removal of the forward crosstube from the helicopter.
- 2) Locate AN742D36 Clamp as shown in Figure 1 of this service instruction and mark location of clamp on the crosstube.
- 3) Remove crosstube finish (paint and primer) in area where AN742D36 Clamp will be installed and touch up affected area with chemical film material (Alodine 1200 or 1201) per MIL-C-5541.
- 4) Install AN742D36 Clamp complete with MS9165-05 per Section A-A of Figure 1 of this service instruction.
- 5) Touch up paint as required per Item 5.3.3 of ICA-D206-667.
- 6) Seal edges where AN742D36 Clamp meets with crosstube using Sikaflex-241/291 or MIL-S-8802 Class B2 or Proseal 890 sealant.
- 7) Install/re-install forward crosstube in accordance with Section 32.2 of ICA-D206-667.
- 8) Fasten OEM grounding strap to MS9165-05 Angle Bracket on forward crosstube per Bell instructions.
- 9) Undertake a resistance check between a ground point on the skidtube and aircraft ground in accordance with Class R-II requirement per BHT-ELEC-SPM. Maximum resistance is 10 milliohms (mΩ).

PARTS LIST:

QTY -017	PART NUMBER	DESCRIPTION
X	D206-667-017	GROUNDING STRAP INSTALLATION
2	AN742D36	CLAMP
2	MS9165-05	ANGLE BRACKET
2	MS21042-3	NUT
2	MS27039-1-08	SCREW
4	NAS1149C0332R	WASHER

WEIGHT AND BALANCE

There is a negligible weight change associated with the installation of this kit.

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO #01-O-01

APPROVED

BY: [Signature]
D. SHEPHERD (DE # 02)

DATE: 11.02.25
CERT. NO.: SH01-5
ISSUE NO.: 3

A	NEW ISSUE	MB	11.02.18
REV.	DESCRIPTION	BY	DATE
DESIGN	<u>[Signature]</u>	DART AEROSPACE LTD	
DRAWN	<u>[Signature]</u>	HAWKESBURY, ONTARIO, CANADA	
CHECKED	<u>[Signature]</u>	DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9544	SHEET 1 OF 2
APPROVED	<u>[Signature]</u>	TITLE	SCALE
DE APPR.	<u>[Signature]</u>	GROUNDING STRAP INSTALLATION	NTS
DATE	11.02.18	COPYRIGHT © 2011 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	

NCR: Yes / No

WORK ORDER NON-CONFORMANCE / UPDATE

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FAULT CATEGORY												
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube			General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio			<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions			<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge		<input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other	

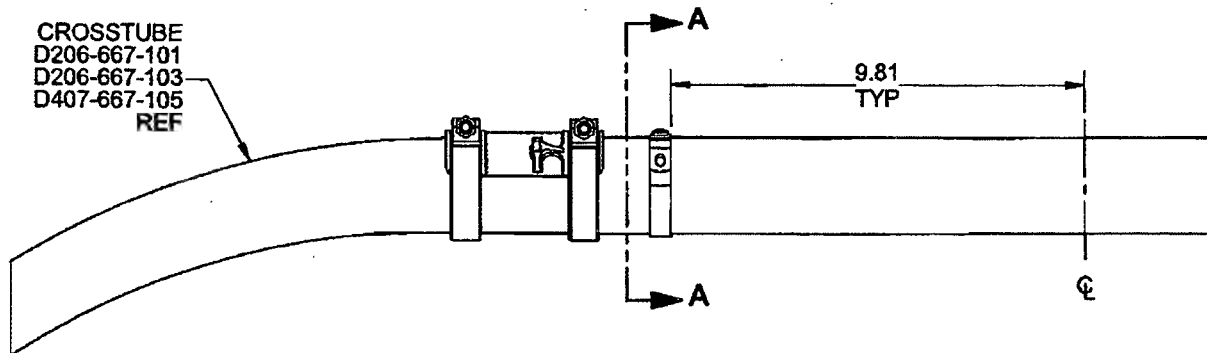
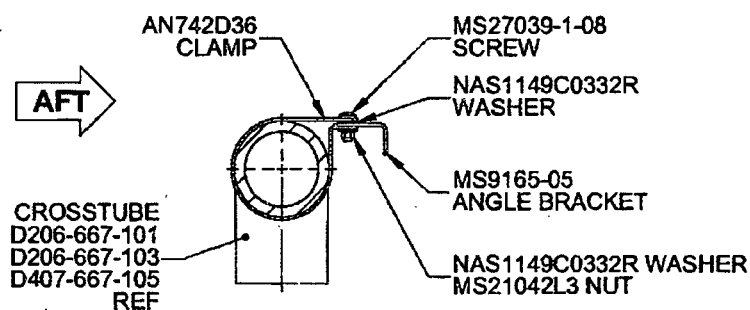


FIGURE 1 - GROUNDING STRAP INSTALLATION
(VIEW LOOKING FWD)



SECTION A-A
(SUPPORT, CLAMP, CUSHION NOT SHOWN FOR CLARITY)
TYP, 2 PL PER CROSSTUBE

CANADA
DEPARTMENT OF TRANSPORT
AIRCRAFT CERTIFICATION
BRANCH
DAO # 01-Q-01

APPROVED
BY: *[Signature]*
D. SHEPHERD (DE # 02)

DATE: 11.02.25
CERT. NO.: SH01-5
ISSUE NO.: 3

DESIGN		DART AEROSPACE LTD	
DRAWN		HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. A
MFG. APPR.	N/A	DSI 9544	SHEET 2 OF 2
APPROVED		TITLE	SCALE
DE APPR.		GROUNDING STRAP INSTALLATION	NTS
DATE	11.02.18	COPYRIGHT © 2011 BY DART AEROSPACE LTD	
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Training <input type="checkbox"/>											
Unapproved <input type="checkbox"/>											

FAULT CATEGORY			
Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio	<input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions	<input type="checkbox"/> Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other

Work Order ID 88746

August-01-12 12:32:53 PM

88746

Item ID: D206-667-103

Accept

N900040100Setup Start ***NS1***

Revision ID:

Item Name: Crosstube Fwd

Start Date: 8/01/12 Start Qty: 1.00

1

Cust Item ID:

Required Date: 8/03/12 Req'd Qty: 1.00

1

Customer:

Reference: REWORK DSI 9544

Approvals: Process Plan: 

Date:

Tooling:

Date:

QC:

Date:

SPC (Y/N):

Date:

DART				TC APPROVAL # 09	
Dart Aerospace Ltd.				TEL: 1-613-632-57	
1270 ABERDEEN ST.					
HAWKESBURY, ON, CANADA K6A 1K7					
P/N	D206-667-103	CHG	CHG005		
DESC.	Crosstube Fwd High	STC	SH01-5		
LOT	B78488	STC	SR01304N		
MODEL	Bell 206L/L1/L3/L4	STC			
MADE IN CANADA				D2	

NR2

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D206-667-143	Rev C (DEO)
DSI9565	A

100

DOCUMENT CONTROL

0.00

100

DC

Document Control

Memo

Photocopy bluefile and create labels as per PPP D206-667-103 CHG005

0.00

0.00

230

Crosstubes

0.00

230

Crosstubes

Crosstubes

Memo

PULL FROM STOCK:

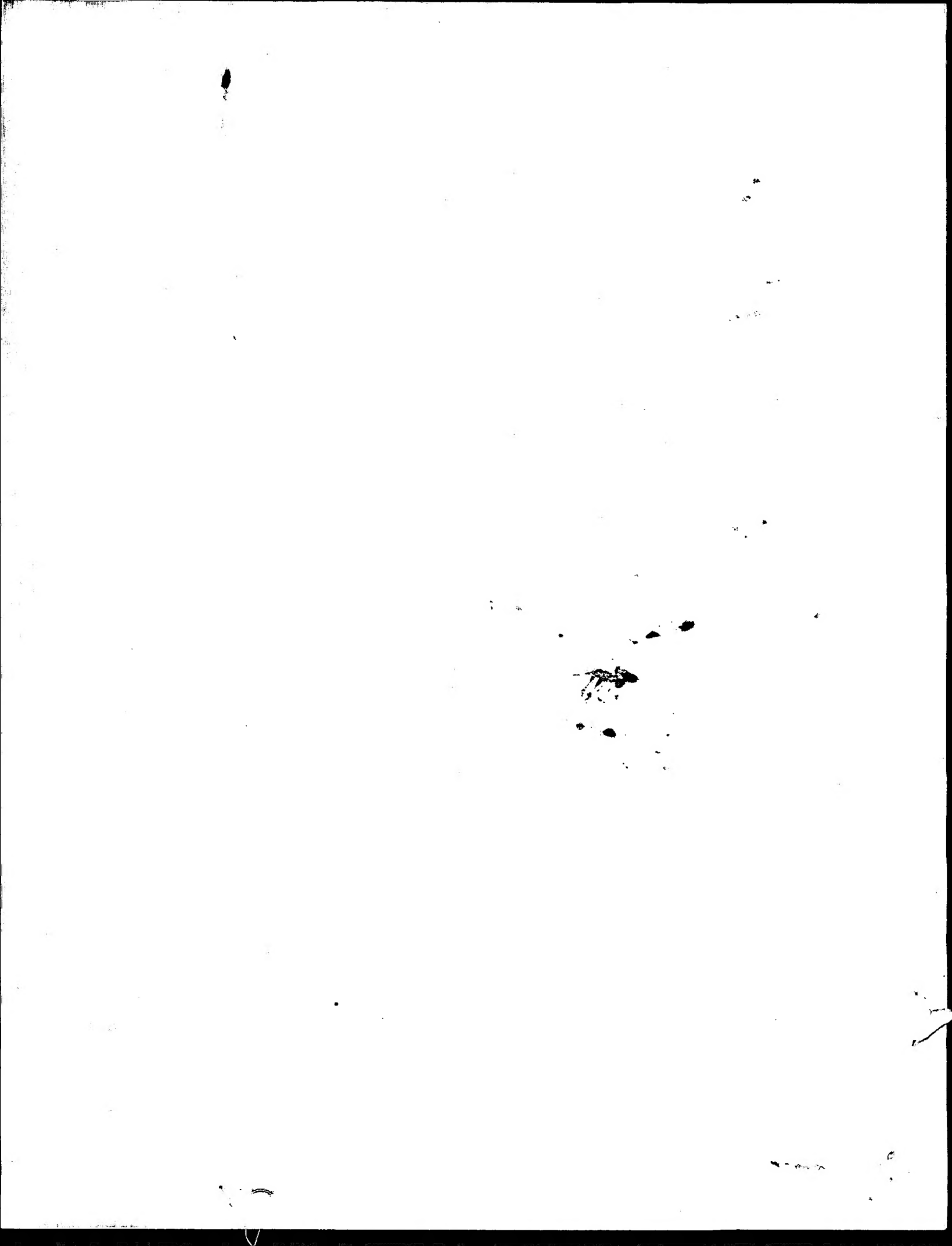
1 X D206-667-103 B78488

(KEEP KIT IN BOX TO REPACKAGE AFTER REWORK)

REOWRK PER DSI 9544

MLT 12/08/07

AB 12-8-2



Non-Conformance Report

Printed on:

Friday, August 24, 2012

Details			
Raised Date 8/16/2012	Status Open	Owner	Number NCR12-1695
Target Date 9/7/2012	Standard		Severity MAJOR
Source Quality Inspection		Audit	
Raised By Person Downing, Eric	Raised Against (Department or Supplier) Manufacturing\Crosstube		Fault Category General\Misread
Details			
<p>i was brought a D206-664-017 kit to inspect after it was installed on QTY 10 cross tubes here at dart. when i was going to start checking the work order pick list to the IIN parts list i found that the qty's of parts were strange. when i started to read the DSI 9544-017 i then saw that the DSI calls for it to be installed in two places on the cross tubes. all the qty of cross tubes were only installed in 1 location. i then questioned the employee who was doing the install here and was informed that it was only installed in 1 location and that he thought it was strange that a grounding strap was installed in two locations on the same tube and took. the employee that was installing it was splitting up the qtys in the kits to do his install. all the cross tubes were inspected incorrectly. the kit was picked correctly having the right qtys of parts in it.</p>			
Product D206-667\D206-667-101/201/103/103			
Document		Root Cause Lack of Attention	
Closed By	Closed Date	Resolution	

Corrective Action			
Target Date 9/7/2012	Owner Smith, Patrick Robert	Closed Date	Closed By
Details			
<p>prevent the common practice of issuing out DSI's for reworks then asking them to be inspected after installs here at Dart.</p>			

Actions			
Number	Owner	Target Date	Completed Date
Details		Response	
4	Lacelle, Linda	8/31/2012	
to stop the practices of handing out DSI for rework purposes and then asking them to be inspected after the installation			
1	Lacelle, Linda	8/31/2012	
pull all qtys of D206-667-101/103/105/107 that have D206-667-017 installed and issue a rework work order to have the clamps correctly installed to the correct qty			

2	Willems, Sian	8/31/2012	
issue a service bulletin or no charge to all the customers that have had D206-667-101/103/105/107 shipped to them missing part of the DSI9544-017/D206-667-017 installed incorrectly			
3	Smith, Patrick Robert	8/31/2012	
retrain all employees involved (Eric D, Andy S, & Matt M). and to Andy S to openly question as installation he has doubts about			

Verification & Review			
Target Date 8/20/2012	Owner	Closed Date	Closed By
Details			

Actions			
Number	Owner	Target Date	Completed Date
Details	Response		